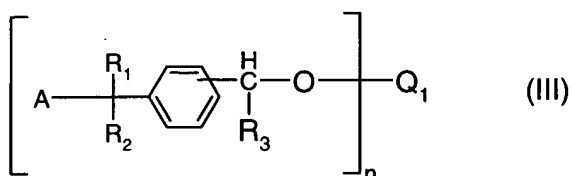
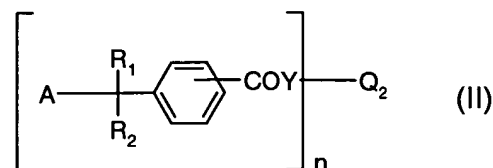
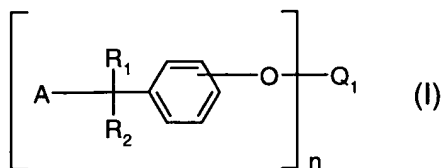


Abstract of the Invention

The invention pertains to a compound of formula (I), (II) or (III)

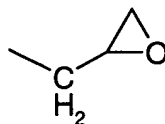


wherein R_1 and R_2 are independently of each other hydrogen, C_1 - C_{18} alkyl, C_3 - C_{18} alkenyl, C_3 - C_{18} alkynyl or phenyl which are unsubstituted or substituted by NO_2 , halogen, amino, hydroxy, cyano, carboxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylamino or di(C_1 - C_4 alkyl)amino;

A is a group capable of forming a stable free nitroxyl radical $\text{A}\bullet$, which is bound via its oxygen atom to the carbon atom; Y is O, NR_3 or $\text{CHR}_3\text{-X}_a$, wherein X_a is O, S or NR_3 ;

R_3 is hydrogen, C_1 - C_{18} alkyl, C_3 - C_{18} alkenyl, C_3 - C_{18} alkynyl or phenyl which are unsubstituted or substituted by NO_2 , halogen, amino, hydroxy, cyano, carboxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylamino or di(C_1 - C_4 alkyl)amino; Q_1 is an organic or inorganic radical, derived from a compound having at least one functional group being capable of reacting with a hydroxy group; Q_2 is an organic radical derived from a mono or polyfunctional alcohol, mono or polyfunctional aminoalcohol, mono or polyfunctional amine mono or polyfunctional mercaptane, mono or polyfunctional phenol or mono or polyfunctional thiophenol; and n is a number from 1 to 20;

with the proviso, that in formula (I) if n is 1, Q_1 is not



, or if n is 2, R_1 is H

and R_2 is $-\text{CH}_2\text{-O-tert-butyl}$, A is not 2,2,6,6-tetramethylpiperidine or 2,2,6,6-tetramethylpiperidine-4-carboxylic acid. Further subjects of the invention are a composition comprising above compounds and at least one ethylenically unsaturated monomer, process for polymerization and the (co)polymers obtained therefrom.

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau(43) International Publication Date
11 January 2001 (11.01.2001)

PCT

(10) International Publication Number
WO 01/02345 A2(51) International Patent Classification: C07C 239/20,
C07D 211/94, C08F 4/00

(21) International Application Number: PCT/EP00/05899

(22) International Filing Date: 26 June 2000 (26.06.2000)

(25) Filing Language: English

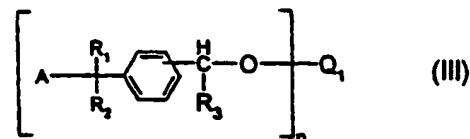
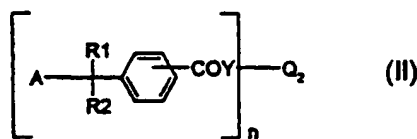
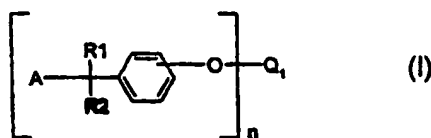
(26) Publication Language: English

(30) Priority Data:
99810567.0 2 July 1999 (02.07.1999) EP(71) Applicant (for all designated States except US): CIBA
SPECIALTY CHEMICALS HOLDING INC. [CH/CH];
Klybeckstrasse 141, CH-4057 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): KRAMER, An-
dreas [CH/CH]; Bundtels 3, CH-3186 Düringen (CH).
NESVADBA, Peter [CH/CH]; Route des Pralettes 83 A,CH-1723 Marly (CH). ZINK, Marie-Odile [FR/FR]; 65,
rue de Brunstatt, F-68200 Mulhouse (FR). WUNDER-
LICH, Wiebke [DE/DE]; Bahnhofstrasse 25a, D-64404
Bickenbach (DE).(74) Common Representative: CIBA SPECIALTY CHEMI-
CALS HOLDING INC.; Patentabteilung, Klybeckstrasse
141, CH-4057 Basel (CH).(81) Designated States (national): AE, AG, AL, AM, AT, AU,
AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE,
DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,
ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS,
LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO,
NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR,
TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.(84) Designated States (regional): ARIPO patent (GH, GM,
KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian
patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European
patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE,
IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG,
CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

[Continued on next page]

(54) Title: MONO AND MULTIFUNCTIONAL ALKOXYAMINES FOR THE PREPARATION OF FUNCTIONALIZED
MACROMERS

(57) Abstract: The invention pertains to a compound of formula (I), (II) or (III) wherein R_1 and R_2 are independently of each other hydrogen, C_1 - C_{18} alkyl, C_3 - C_{18} alkenyl, C_3 - C_{18} alkynyl or phenyl which are unsubstituted or substituted by NO_2 , halogen, amino, hydroxy, cyano, carboxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylamino or di(C_1 - C_4 alkyl)amino; A is a group capable of forming a stable free nitroxyl radical $A\cdot$, which is bound via its oxygen atom to the carbon atom; Y is O, NR_3 or $\text{CHR}_3\text{-X}_n$, wherein X_n is O, S or NR_3 ; R_3 is hydrogen, C_1 - C_{18} alkyl, C_3 - C_{18} alkenyl, C_3 - C_{18} alkynyl or phenyl which are unsubstituted or substituted by NO_2 , halogen, amino, hydroxy, cyano, carboxy, C_1 - C_4 alkoxy, C_1 - C_4 alkylthio, C_1 - C_4 alkylamino or di(C_1 - C_4 alkyl)amino; Q_1 is an organic or inorganic radical, derived from a compound having at least one functional group being capable of reacting with a hydroxy group; Q_2 is an organic radical derived from a mono or polyfunctional alcohol, mono or polyfunctional aminoalcohol, mono or polyfunctional amine mono or polyfunctional mercaptane, mono or polyfunctional phenol or mono or polyfunctional thiophenol; and n is a number from 1 to 20; with the provision that in formula (I) if n is 1, Q_1 is not (a), or if n is 2, R_1 is H, and R_2 is $-\text{CH}_2\text{-O-tert-butyl}$, A is not 2,2,6,6-tetramethylpiperidine or 2,2,6,6-tetramethylpiperidine-4-carboxylic acid. Further subjects of the invention are a composition comprising above compounds and at least one ethylenically unsaturated monomer, process for polymerization and the (c) polymers obtained therefrom.